

- Public Notice -

**Engineering Evaluation/Cost Analysis and Action Memorandum
for
Installation Restoration Site 1114
Marine Corps Base Camp Pendleton**

Marine Corps Base (MCB) Camp Pendleton, CA, announces the availability of the Engineering Evaluation/Cost Analysis (EE/CA) and Action Memorandum (AM) for Installation Restoration (IR) Site 1114, also known as the 41 Area Arroyo Site. The project was conducted under the Installation Restoration Program (IRP) at MCB Camp Pendleton. The IRP addresses the potential safety, health, and environmental issues caused by past Department of Defense (DoD) activities, and is an element of the Secretary of Defense's Defense Environmental Restoration Program.

IR Site 1114 is located in the 41 Area of MCB Camp Pendleton. The site lies within a designated maneuver area used for military training activities, and occupies a small drainage (arroyo) covered by natural vegetation.

A Preliminary Assessment and Site Inspection (PA/SI) performed at IR Site 1114 between 2004 and 2009 investigated soil, soil gas and groundwater for site-related contaminants. The PA/SI concluded that tetrachloroethene (PCE), a chlorinated volatile organic compound (VOC), exists in groundwater at concentrations above the maximum contaminant level (MCL), and petroleum hydrocarbon-related compounds exist in soil gas across the site. Following the recommendations of the PA/SI, a Remedial Investigation (RI) was performed in 2011. The RI identified the nature and extent of site contaminants in soil, soil gas, and groundwater, and identified potential risks to human health and the environment through a human health risk assessment and a screening level ecological risk assessment. The RI concluded that PCE concentrations in groundwater remain above the MCL and potential risk to human health exists if groundwater was used in the future for residential activities. Although there are no plans to use the site for residential activities in the future, the RI recommended cleanup of the groundwater.

An EE/CA and AM were developed for IR Site 1114 in 2012 to identify potential cleanup alternatives and select an appropriate action for VOC-impacted groundwater. The selected alternative consists of: 1) excavation and off-site disposal of the saturated PCE-contaminated soil; 2) dewatering of the excavation zone and treatment of the removed groundwater; and, 3) bioremediation of residual groundwater contaminants using emulsified vegetable oil as a component of the excavation backfill material. The Final EE/CA and AM will be developed at the conclusion of a one-month public review period pursuant to 40 Code of Federal Regulations Section 300.415 (n)(4) on conducting Non-Time Critical Removal Actions.

Nearby residents and interested parties can find a copy of the EE/CA and AM at the MCB Camp Pendleton Information Repositories, located at:

**Oceanside Public Library
Civic Center Branch
Periodical Storage, Lower Level**
330 North Coast Highway
Oceanside, CA 92054-2824
(760) 435-5600
<http://www.library.ci.oceanside.ca.us/>

Marine Corps Base Camp Pendleton
Environmental Security Office
Building 22165
Camp Pendleton, CA 92055-5008
joseph.murtaugh@usmc.mil

IRP Web Site
<http://www.pendleton.marines.mil/StaffAgencies/InstallationRestorationProgram.aspx>

For questions or comments regarding the IR Site 1114 EE/CA and AM, or other IRP activities at MCB Camp Pendleton, please contact Mr. Joseph Murtaugh, IR Section Head, by e-mail at joseph.murtaugh@usmc.mil; or Ms. Theresa Morley, Department of the Navy Remedial Project Manager, by e-mail at theresa.morley@navy.mil. Questions or comments can be mailed to Ms. Morley at:

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